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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,852	06/24/2002	Dirk Stockhusen	112740	2531

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EXAMINER	
BASOM, BLAINE T	
ART UNIT	**PAPER NUMBER**
2173	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,852	STOCKHUSEN, DIRK	
	Examiner	Art Unit	
	Blaine Basom	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/8/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 9, there is no antecedent basis for "the preselection window."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,219,731, which is attributed to Gutowitz, and also over 5,991,396, which is attributed to Salm et al. (hereinafter referred to as "Salm"). In general, Gutowitz presents a method for reducing the amount of keystrokes required for entering text via an ambiguous keypad, i.e. a keypad having a plurality of characters associated with one or more of its keys (for example, see column 1, line 13 – column 2, line 2).

Regarding claim 9, Gutowitz particularly teaches defining at least one key to have an associated plurality of characters, including at least one digit and at least one letter, with each of

the plurality of characters being input using a particular number of keystrokes associated with the character (for example, see column 1, line 23 – column 2, line 2; and column 4, lines 45-63). When a user enters a string of characters, Gutowitz discloses that the association between characters and the number of keystrokes required for inputting the characters is automatically matched to the user's behavior in response to, and in dependence on, a character which has been input (for example, see column 3, line 30 – column 4, line 3; column 4, line 45 – column 5, line 14; and column 5, line 21 – column 6, line 7). This association between characters and the number of keystrokes is matched to the user's behavior such that the number of keystrokes is reduced as compared with a fixed association between the characters and the number of keystrokes required for inputting the characters (for example, see column 3, line 30 – column 4, line 3; column 4, line 45 – column 5, line 14). Additionally, Gutowitz discloses that, in response to the user entering a number of keystrokes with a single key, the character associated with the number of keystrokes is displayed to the user for selection, presumably on a display screen. If this character is not one in which the user desires, the user may enter an additional keystroke to display a different character for selection. This process may be repeated until the user finds a desired character (for example, see column 5, lines 21-46). Accordingly, it is understood that the plurality of characters associated with a key is sequentially displayed to the user as he or she enters keystrokes using the key. The user's display screen is thus considered a "selection window" and "preselection window" like recited in the claimed invention, since it is used to select a character to be input, and since it shows the characters which can be input using a key in a sequential order which corresponds to a current association between characters and the number

of keystrokes which are required for inputting the characters. Gutowitz, however, does not explicitly disclose that a currently selected character is shown highlighted, as is expressed in 9.

Nevertheless, it is well known in such environments to highlight the characters as they are presented to the user. For example, Salm presents an ambiguous keypad, whereby like taught by Gutowitz, the characters associated with a key are sequentially presented to the user has he or she repeatedly enters keystrokes with the key (for example, see column 1, lines 5-50; and column 5, line 15 – column 6, line 24). While cycling through the characters, a currently selected character is highlighted with a blinking cursor (see column 5, line 15 – column 6, line 24).

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Gutowitz and Salm before him at the time the invention was made, to include within the display taught by Gutowitz the cursor of Salm, which highlights a currently selected character as the user cycles through characters associated with a key. It would have been advantageous to one of ordinary skill to utilize this combination, because such a cursor effectively indicates to the user where a character will be placed within a string of text, which as demonstrated by Salm, is a useful feature for a text entry application.

Regarding claim 13, Gutowitz discloses that the above-described method may be implemented on an apparatus having a keyboard comprising at least one key associated with a plurality of alphanumeric characters (for example, see column 1, lines 23-62; and column 5, line 47 – column 6, line 7); having a memory for storing information relating to an association between characters and the number of keystrokes required for inputting the characters (for example, see column 8, line 38 – column 9, line 52); having a display device for displaying a preselection window which is used to select a character to be input, as is described above; and

having a processor, referred to as an "orderings selector" (see column 5, line 47 – column 6, line 7), which is set up such that, when a string of characters is input, the association between the characters and the number of keystrokes required for inputting the character can be automatically matched to a user's behavior in response to a character which has been input, the matching being structured such that the number of keystrokes is reduced as compared with a fixed association between the characters the number of keystrokes required for inputting the characters, and whereby as described above, the preselection window sequentially shows the characters which can be input using a key in an order which corresponds to a current association between the characters and the number of keystrokes required for inputting the characters. Salm further teaches that a currently selected character may be highlighted, as is described above. Accordingly, such an apparatus implementing the above-described teachings of Gutowitz and Salm is considered an apparatus, like that described in claim 13, which is for inputting alphanumeric characters.

As per claims 10-12 and 14-15, Gutowitz teaches dynamically changing the order of characters associated with each of the keys of an ambiguous keypad, so that the number of keystrokes required to input characters is reduced, as is described above. The order of characters associated with each key is particularly changed based on previously input characters, so that the character with the highest probability of being entered next is positioned first in the order (for example, see column 3, line 30 – column 4, line 3; and column 5, line 46 – column 6, line 7 of Gutowitz). Accordingly, in response to entering a character, only one keystroke is generally required to enter a subsequent character (as is exemplified by figure 4 of Gutowitz, and its associated description in column 7, lines 24-39). Salm teaches that such characters may

comprise letters, digits, and other symbols, such as punctuation marks (for example, see column 5, lines 17-26). This combination of Gutowitz and Salm thus suggests that, in response to the input of a character, such as a letter, digit, or other symbol, the input of a second letter, digit, or other symbol may require only one keystroke.

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. The applicant is required under 37 C.F.R. §1.111(C) to consider these references fully when responding to this action. The Bond et al. U.S. Patent cited therein, like the U.S. Patent of Gutowitz described above, teaches dynamically changing the order of characters associated with a key of an ambiguous keypad in order to reduce the number of keystrokes necessary to enter text. Additionally, the Bond et al. U.S. Patent teaches displaying to the user the changed order. The Kraft et al. U.S. Patent cited therein teaches displaying to the user a preselection window, similar to that of claim 1, wherein currently selected character is shown highlighted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb

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